Amendments to the Claims:

1.-17. (cancelled)

18. (Currently Amended) A method for routing of data packets for avoiding circulation of the data packets, in a packet-switched network connected to a plurality of external networks, ~~made up of routers, which uses traffic distribution~~, the method comprising:

assigning unique node identifiers to nodes of a packet switched network (N1);

providing a destination table that associates for each external network connected to the packet switched network (N1) an Egress Label (EL) based on the unique node number for the node that comprises an exit point to that external network;

providing a routing table for each node in the packet-switched network (N1) for forwarding data packets through the packet-switched network comprising Ingress/Egress Label (IL/EL) pairs, wherein the Ingress Label (IL) is based on the unique node number for the node that comprises an entry point into the packet switched network (N1), wherein each ~~routing table comprises~~ IL/EL pair is associated with next hop data ~~for each pair of ingress/egress nodes where the data packet can enter and leave the packet-switched network respectively~~;

~~assigning~~ appending a label to a data packet at an ingress node where the data packet enters the packet switched network (N1), wherein the label comprises an Ingress Label(IL) based on the unique node number for the node that comprises the entry point into the packet switched network (N1) and an Egress Label (EL) extracted from the destination table by reference to the external network address in the data packet, ~~data~~ representing the ingress node and an egress node where the data packet will enter and leave the packet-switched network (N1), respectively;

forwarding the data packet from the ingress node to the egress node by an internal router of the packet-switched network by accessing the routing table for each node traversed in the packet-switched network, and reading the next hop data for the IL/EL pair ~~pair of ingress/egress nodes~~ that coincides with the label; and

providing alternative loop-free routes for the forwarding of the data packet in the routing table for each IL/EL pair ~~pair of ingress/egress nodes~~ when an alternate next hop is available, wherein loops are avoided because the ingress node identified by the IL is excluded as an alternative route.

19. (previously presented) The method according to Claim 18, further comprising:

providing the data packet at the ingress node with identification data used by the internal router to identify the ingress node and egress node.

20. (previously presented) The method according to Claim 19, wherein the identification data include an identifier or a network address for the ingress node and egress node.

21. (previously presented) The method according to Claim 20, wherein

at the ingress node the data packet is supplied with a data field, and wherein

the internal router takes from the data field the data about the ingress node at which the packet entered the packet-switched network and the data about its egress node.

22. (previously presented) The method according to Claim 21, wherein

the data packet is supplied with a data field, wherein

the data field is added onto the data packet as a header or a trailer, and wherein

the data field includes an identifier for the ingress node and the egress node.

23. (previously presented) The method according to Claim 21, wherein

the data packet is supplied with two data fields, wherein

each of the data fields is added to the data packet as a header or a trailer, wherein

one of the data fields includes an identifier for the ingress node and the other data field includes an identifier for the egress node.

24. (previously presented) The method according to Claim 22, wherein a bit sequence is appended to or prefixed to at least one data field, identifying the data field as such.

25. (previously presented) The method according to Claim 22, wherein

at the ingress node, the data packet is supplied with at least one data field, and wherein

this data field is removed at the egress node.

26. (previously presented) The method according to Claim 21, wherein at least one data field is provided by a Multiprotocol Label Switching label.

27. (previously presented) The method according to Claim 20, wherein the identification data is written into a field provided as part of the format for the data packet.

28. (previously presented) The method according to Claim 18, wherein

the egress node is referenced by an identifier, wherein

the identifier of the egress node is determined by reference to a network address in the network, to which the data packet is to be forwarded after it has traversed the packet-switched network, and wherein

the determination of the identifier of the egress node is carried out at the ingress node by reference to the network address, using a table.

29. (previously presented) The method according to Claim 18, further comprising:

supplying the data packet at the ingress node with an identification data used by the internal router for identifying the ingress node, wherein the identification data include an identifier or a network address for the ingress node; and

determining the data about the egress node by the internal router by using address data extracted from the data packet.

30. (previously presented) The method according to Claim 18, wherein the internal router determines the data about the ingress node and the data about the egress node by using address data extracted from the data packet.

31. (previously presented) The method according to Claim 18, wherein the routing table assigns the data about the ingress node at which the data packet entered the packet-switched network and the data about the egress node to a network address for the next hop.

32. (previously presented) The method according to Claim 18, further comprising:

supplying the data packet at the ingress node with a data field for identifying the flow; and

performing the forwarding of the data packet by the internal router according to the data field.

33. (cancelled).

34. (new) An internal router in a packet-switched network having a plurality of nodes, connected to a plurality of external networks for performing a method for routing of data packets for avoiding circulation of the data packets, comprising:

a destination table that associates for each external network connected to the packet switched network an Egress Label (EL) based on a unique node number assigned to each node that comprises an exit point to that external network;

a routing table for each node in the packet-switched network for forwarding data packets through the packet-switched network comprising Ingress/Egress Label (IL/EL) pairs, wherein the Ingress Label (IL) is based on the unique node number for the node that comprises an entry point into the packet switched network, wherein each IL/EL pair is associated with next hop data;

wherein the internal router:

appends a label to a data packet at an ingress node where the data packet enters the packet switched network, wherein the label comprises an Ingress Label (IL) based on the unique node number for the node that comprises the entry point into the packet switched network and an Egress Label (EL) extracted from the destination table by reference to the external network address in the data packet, representing the ingress node and an egress node where the data packet will enter and leave the packet-switched network, respectively;

forwards the data packet from the ingress node to the egress node by an internal router of the packet-switched network by accessing the routing table for each node traversed in the packet-switched network, and reading the next hop data for the IL/EL pair that coincides with the label; and

provides alternative loop-free routes for the forwarding of the data packet in the routing table for each IL/EL pair when an alternate next hop is available, wherein loops are avoided because the ingress node identified by the IL is excluded as an alternative route.